

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/086,902	HUNDLEY, JOSEPH W.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Cephia D. Toomer	1714	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the telephone interview of 8/5/04.
2. ☒ The allowed claim(s) is/are 62-80.
3. ☒ The drawings filed on 04 June 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                       |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                     | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|  | 9. <input type="checkbox"/> Other _____.  |

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James Hiney on August 5, 2004.

The application has been amended as follows:

Cancel claims 1-61.

62. (New) A liquid chemical change reagent for use with solid fuels, such as coal or wood, prior to combustion thereof, to reduce NOX and to facilitate complete combustion consisting of: a hydrocarbon wax which includes a fatty acid, water and a base to neutralize the fatty acid, said neutralized fatty acid is a primary emulsifying agent and forms an oil and water emulsion, whereby NOX are reduced and complete combustion is facilitated.

63. (New) The chemical change reagent as in claim 62 wherein said fatty acid is stearic acid.

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64. (New) The chemical A change reagent as in claim 62 wherein said hydrocarbon wax is selected from the group consisting of paraffin wax, slack wax, microcrystalline wax, olefinic wax materials and mixtures thereof.

65. (New) The chemical change reagent as in claim 62 wherein said hydrocarbon wax is paraffin wax with paraffin oil.

66. (New) The chemical change reagent as in claim 62 and wherein the base is ammonia or ammonia hydroxide which reacts with the fatty acid.

67. (New) The chemical change reagent as in claim 62 wherein the percentage of fatty acid is 2% by weight.

68. (New) The chemical change reagent as in claim 64 wherein said reagent consists of 46% by weight of said paraffin wax.

69. (New) The chemical change reagent for use with solid fuels, such as coal or wood, prior to combustion thereof, to reduce NOX and to facilitate complete combustion consisting of: a hydrocarbon wax which includes a fatty acid, water and a base to neutralize the fatty acid, said neutralized fatty acid is a primary emulsifying agent and forms an oil and water emulsion, and titanium dioxide, whereby NOX are reduced and complete combustion facilitated.

70. (New) The chemical change reagent as in claim 69 wherein said titanium dioxide is 4.5% by weight.

71. (New) The chemical change reagent for use as a combustible fuel additive to enhance complete combustion and/or reduce NOX and to facilitate complete combustion consisting of the following:

Slack wax	46.3%
Other wax	2.0%
Ammonia	0.2%
Titanium Dioxide	4.5%
Water	47.0%

72. (New) The chemical change reagent as in claim 71 wherein said other wax is stearic acid.

73. (New) The chemical change reagent as in claim 71 wherein said slack wax is paraffin wax.

74. (New) A method of reducing NOX and facilitating complete combustion of solid fuels such as coal and wood, said method comprising applying a chemical change agent to said solid fuels prior to combustion, said chemical change agent consisting of a hydrocarbon wax, stearic acid and other fatty acids, a base for pH

adjustment which reacts with said fatty acid, and water; and burning said solid fuels.

75. (New) The method of claim 74 wherein said base is ammonia.

76. (New) The method of reducing NOX and facilitating complete combustion of solid fuels such as coal and wood, said method comprising applying a chemical change agent to said solid fuels prior to combustion, said chemical change agent consisting of a hydrocarbon wax, stearic acid and other fatty acids, a base for pH adjustment which reacts with said fatty acid, water and titanium dioxide; and burning said solid fuels.

77. (New) The method of claim 76 wherein said base is potassium hydroxide.

78. (New) The method of claim 76 wherein said base is sodium hydroxide.

79. (New) The method of claim 74 wherein said wax is present from 0.5% to 70% by weight.

80. (New) A chemical change reagent for application to coal for enhancing the combustion thereof and/or reducing NOX and facilitating complete combustion consisting of the following composition by weight.

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0.5% to 70% of paraffin wax and stearic acid or other fatty acid;

0.2% of a base for pH adjustment, said base reacting with said

fatty acid, and

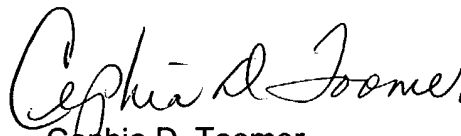
30% to 99% water.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Cephia D. Toomer  
Primary Examiner  
Art Unit 1714

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